

EX-1

EXHIBIT 1

PACKAGE INSERT

ESTROSTEP® 21

(Norethindrone Acetate and Ethynodiol Diacetate)

ESTROSTEP® Fe

(Norethindrone Acetate and Ethynodiol Diacetate and Ferrous Fumarate Tablets)

ESTROSTEP® 21

(Each white triangular tablet contains 1 mg norethindrone acetate and 20 mcg ethynodiol diacetate; each white square tablet contains 1 mg norethindrone acetate and 30 mcg ethynodiol diacetate; each white round tablet contains 1 mg norethindrone acetate and 35 mcg ethynodiol diacetate.)

ESTROSTEP® Fe

(Each white triangular tablet contains 1 mg norethindrone acetate and 20 mcg ethynodiol diacetate; each white square tablet contains 1 mg norethindrone acetate and 30 mcg ethynodiol diacetate; each white round tablet contains 1 mg norethindrone acetate and 35 mcg ethynodiol diacetate; each brown tablet contains 75 mg ferrous fumarate.)

Patients should be counseled that this product does not protect against HIV infection (AIDS) and other sexually transmitted diseases.

DESCRIPTION

Estrostep is a graduated estrophasic providing estrogen in a graduated sequence over a 21-day period with a constant dose of progestogen.

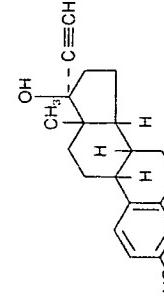
Estrostep 21 provides for a 21-day dosage regimen of oral contraceptive tablets.

Estrostep Fe provides for a continuous dosage regimen consisting of 21 oral contraceptive tablets and seven ferrous fumarate tablets. The ferrous fumarate tablets are present to facilitate ease of drug administration via a 28-day regimen, are non-hormonal, and do not serve any therapeutic purpose.

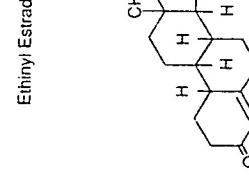
Each white triangle-shaped tablet contains 1 mg norethindrone acetate [(17 alpha)-17-acetoxy]-19-norpregna-4-en-20-*beta*-ol-3-one] and 20 mcg ethynodiol diacetate [(17 alpha)-1 mg norethindrone acetate-1,3,5(10)-trien-20-*beta*-ol-3,17-diol]; each white square-shaped tablet contains 1 mg norethindrone acetate and 30 mcg ethynodiol diacetate; each white round tablet contains 1 mg norethindrone acetate and 35 mcg ethynodiol diacetate. Each tablet also contains calcium stearate, lactose, microcrystalline cellulose, and starch.

The structural formulae are as follows:

Chemical Structure



Ethyndiol Diacetate



Norethindrone Acetate

The information contained in this package insert is principally based on studies carried out in patients who used oral contraceptives with higher formulations of estrogens and progestogens than those in common use today. The effect of long-term use of the oral contraceptives with lower formulations of both estrogens and progestogens remains to be determined.

Throughout this labeling, epidemiological studies reported are of two types: retrospective or case control studies and prospective cohort studies. Case control studies provide a measure of the relative risks of a disease, namely, a ratio of the incidence of a disease among oral contraceptive users to that among nonusers. The relative risk does not provide information on the actual clinical occurrence of a disease. Cohort studies provide a measure of attributable risk, which is the difference in the incidence of disease between oral contraceptive users and nonusers. The attributable risk does provide information about the actual occurrences of a disease in the population (adapted from References 8 and 9 with the authors' permission). For further information, the reader is referred to a text on epidemiological methods.

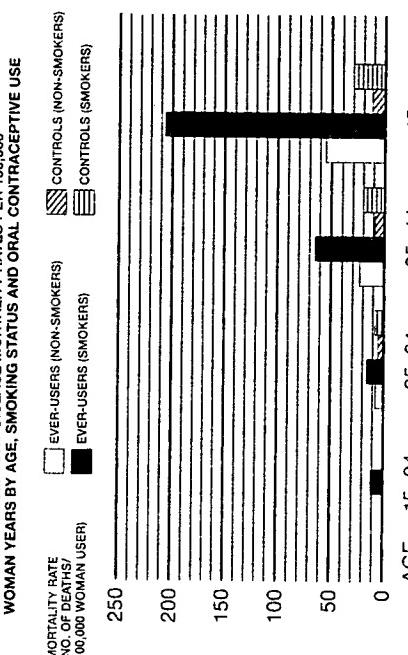
1. Thromboembolic Disorders and Other Vascular Problems

a. Myocardial Infarction

An increased risk of myocardial infarction has been attributed to oral contraceptive use. This risk is primarily in smokers or women with other underlying risk factors for coronary artery disease such as hypertension, hypercholesterolemia, morbid obesity, and diabetes. The relative risk of heart attack for current oral contraceptive users has been estimated to be two to six [10-16]. The risk is very low under the age of 30.

Smoking in combination with oral contraceptive use has been shown to contribute substantially to the incidence of myocardial infarctions in women in their mid-thirties or older with smoking accounting for the majority of excess cases [17]. Mortality rates associated with circulatory disease have been shown to increase substantially in smokers over the age of 35 and non-smokers over the age of 40 (Table II) among women who use oral contraceptives.

TABLE II
CIRCULATORY DISEASE MORTALITY RATES PER 100,000 WOMAN YEARS BY AGE, SMOKING STATUS AND ORAL CONTRACEPTIVE USE



Adapted from P.M. Layde and V. Beral, Reference 18.

Oral contraceptives may compound the effects of well-known risk factors, such as hypertension, diabetes, hyperlipidemia, age and obesity [19]. In particular, some progestogens are known to decrease HDL cholesterol, and cause glucose intolerance, while estrogens may create a state of hyperinsulinism [20-24]. Oral contraceptives have been shown to increase blood pressure among users. See Section 9 in WARNINGS. Similar effects on risk factors have been associated with an increased risk of heart disease. Oral contraceptives must be used with caution in women with cardiovascular disease risk factors.

b. Thromboembolism

An increased risk of thromboembolic and thrombotic disease associated with the use of oral contraceptives is well established. Case control studies have found the relative risk of users compared to nonusers to be 3 for the first episode of superficial venous thrombosis, 4 to 11 for deep vein thrombosis or pulmonary embolism, and 1.5 to 6 for women with predisposing conditions for venous thromboembolic disease [9, 10, 25-30]. Cohort studies have shown the relative risk to be somewhat lower, about 3 for new cases and about 4.5 for new cases requiring hospitalization [31]. The risk of thromboembolic disease due to oral contraceptives is not related to length of use and disappears after pill use is stopped [8].

A two- to four-fold increase in relative risk of postoperative thromboembolic complications has been reported with the use of oral contraceptives [11, 32]. The relative risk of various thromboses in women who have predisposing conditions is twice that of women without such medical conditions [11, 32]. If feasible, oral contraceptives should be discontinued at least 4 weeks prior to and for 2 weeks after elective surgery or a procedure associated with an increased risk of thromboembolic disease.

The onset or exacerbation of migraine or dizziness, or severe requires discontinuation of the cause.

11. Bleeding Irregularities

Breakthrough bleeding and spotting are sometimes experienced, especially during the first three months.

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(Norethindrone Acetate and Ethynodiol Diacetate and Ferrous Fumarate Tablets)

ESTROSTEP® Fe

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Ferrous fumarate tablets are not USP.

Studies from Britain have shown an increased risk (58-60) in long-term (>5 years) oral contraceptive use in the U.S., and the attributable risk (the contraceptive users approach) less than one per year.

5. Ocular Lesions

There have been clinical case reports of retinal contractions. Oral contraceptives should be discontinued if symptoms of proptosis or complete loss of vision, onset of proptosis or changes in ocular function occur. Appropriate diagnostic and therapeutic measures should be taken.

6. Oral Contraceptive Use Before and After Pregnancy

Extensive epidemiological studies have revealed that women who have used oral contraceptives prior to pregnancy have a particularly insidious risk of cardiac disease [6, 16, 62, 64, 65], when taken inadvertently. The administration of oral contraceptives to infants as a test for pregnancy. Oral contraceptives should be discontinued if habitual abortion.

7. Gallbladder Disease

It is recommended that for any patient who has had gallbladder disease before discontinuing oral contraceptives, refer to the prescribed schedule. The possibility of pyrexia should be ruled out before discontinuing oral contraceptives.

8. Carbohydrate and Lipid Metabolism

Earlier studies have reported an increased risk of oral contraceptives and estrogens [66, 67]. A recent study has shown that the relative risk of developing gallbladder disease is minimal [68-70]. The recent findings of minimum risk formulations containing lower hormone levels have been reported in oral contraceptives.

9. Elevated Blood Pressure

Oral contraceptives have been shown to cause an increase in blood pressure has been reported [23]. Oral contraceptives contain progestins, which lower doses of estrogen increase insulin secretion and create insulin resistance agents [23, 72]. However, in the appear to have no effect on fasting blood glucose effects, pre-diabetics and diabetic women should be encouraged to use another method of contraceptives; they should be monitored closely if side effects occur. Oral contraceptives should be discontinued if hypertension or hypertension should be discontinued if hypertension or hypertension occurs.

10. Headache

The onset or exacerbation of migraine or dizziness, or severe requires discontinuation of the cause.